POINTS TO CONSIDER

APPENDIX D

NON-TECHNICAL SUMMARY

Bone marrow transplant using a mismatched or unrelated donor is the only curative treatment for patients with some types of leukemia. Patients who receive this type of transplant have a high risk of viral infections while their new marrow is growing back. One such problem that occurs in these patients is EBV lymphproliferation where cells infected with the EBV virus grow in an uncontrolled manner. This complication is almost always fatal in such patients.

Outgrowth of EBV infected cells is normally prevented by T cells which specifically recognize EBV infected cells and kill them. We wish to determine if we can prevent this significant complication by generating EBV specific T cells from the BMT donor and infusing them during the period when the patient is at risk after the transplant.

Marking these cells with the neomycin resistance gene is an important part of the study as it will allow us to learn how long these cells survive in the patient and whether expansion occurs and therefore how long they may provide protection. This information will allow us to learn if this approach may be beneficial and what dosage regimens would be appropriate.